This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a minor, municipal permit. The discharge results from the operation of a 0.09 MGD wastewater treatment plant. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260-00 et seq.

seq.					
1.	Facility Name and Mailing Address:	Federal Emergency Management Agency Mt. Weather Emergency Operations Center P.O. Box 129 Mt. Weather, VA 22611-0129	SIC Code:	4952 WWTP	
	Facility Location:	19844 Blue Ridge Mountain Road Mt. Weather, VA 20135-2006	County:	Loudoun	
	Facility Contact Name:	Peter D. Mango Supervisory Engineering Tech	Telephone Number:	540-542-2368	
2.	Permit No.:	VA0024759	Current Expiration Date:	11 August 2008	
	Other VPDES Permits:	VA0091464 – Industrial Discharge Permit			
	Other Permits:	Registration Number 73694 – DEQ Air Perm	it		
	E2/E3/E4 Status:	Not Applicable			
3.	Owner Name:	Federal Emergency Management Agency Mt. Weather Emergency Operations Center			
	Owner Contact/Title:	Peter D. Mango Supervisory Engineering Tech	Telephone Number:	540-542-2368	
4.	Application Complete Date:	27 May 2008			
	Permit Drafted By:	Douglas Frasier	Date Drafted:	28 June 2008	
	Draft Permit Reviewed By:	Alison Thompson	Date Reviewed:	2 July 2008	
	Public Comment Period:	Start Date: 20 August 2008	End Date:	19 September 2008	
5.	Receiving Waters Information	: See <b>Attachment 1</b> for the Flow Frequency	Determination		
	Receiving Stream Name:	Jeffries Branch, UT			
	Drainage Area at Outfall:	0.1 square miles	River Mile:	1.19	
	Stream Basin:	Potomac River	Subbasin:	Potomac River	
	Section:	9	Stream Class:	III	
	Special Standards:	None	Waterbody ID:	VAN-A05R	
	7Q10 Low Flow:	0.0 MGD	7Q10 High Flow:	$0.0\mathrm{MGD}$	
	1Q10 Low Flow:	0.0 MGD	1Q10 High Flow:	$0.0\mathrm{MGD}$	
	Harmonic Mean Flow:	0.0 MGD	30Q5 Flow:	0.0 MGD	
	303(d) Listed:	No	30Q10 Flow:	0.0 MGD	
	TMDL Approved:	Downstream – Goose Creek watershed for fecal coliform and benthic	Date TMDL Approved:	1 May 2003 (revised June 2006) and 26 April 2004; respectively	
6.	Statutory or Regulatory Basis	for Special Conditions and Effluent Limitation	ns:		
	✓ State Water Control	Law	EPA Guidelines		
	✓ Clean Water Act		✓ Water Quality Standa	ards	
	✓ VPDES Permit Regu	ılation	Other		
	✓ EPA NPDES Regula	tion			
7	Licensed Operator Description	onto. Class III			

Class III

Class II

7.

8.

**Licensed Operator Requirements:** 

Reliability Class:

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9.	Parmit	( 'haracta	erization:
<i>J</i> .	1 CI IIII	Chai acu	ti izauvii.

	Private	✓	Effluent Limited	Possible Interstate Effect
✓	Federal	✓	Water Quality Limited	Compliance Schedule Required
	State		Toxics Monitoring Program Required	Interim Limits in Permit
	POTW		Pretreatment Program Required	Interim Limits in Other Document
✓	TMDL			

# 10. Wastewater Sources and Treatment Description:

The facility has a permitted flow of 0.09 MGD, averaging about 0.036 MGD. Wastewater flows via gravity to the headworks where it passes through a manual, course bar screen. There is a bypass line from the bar screen, which can route the wastewater to the secondary clarifier, if needed. After preliminary treatment, flow is directed to a conventional Imhoff tank. The Imhoff tank consists of an upper chamber in which sedimentation takes place, allowing solids to settle, sliding down an inclined bottom into a lower chamber in which the sludge is collected and digested. This design allows sewage flow only through the upper sedimentation chamber and no flow of sewage in the lower digestion chamber. The lower chamber requires separate biogas vents and pipes for the removal of digested sludge, typically after 6-9 months of digestion. The operators run a chain through the main slot on a daily basis to keep the scum layer in the digester vents at a manageable thickness. Surface scum on the clarifier portion of the tank is broken up twice a year and the sludge is drained from the digesters on the same schedule.

Sludge removal typically occurs in May and October and is spread on drying beds adjacent to the plant based on operator experience and the amount of gasification occurring in the digesters. Drying bed supernatant is collected and returned to the STP at the head of the plant. Dried solids are hauled to the Frederick County landfill.

After the Imhoff tank, wastewater is distributed across a fixed granite media trickling filter. There are a total of 32 nozzles, but typically only half of them are utilized due to the low flows. Following the filter, flow passes through a secondary clarifier. Scum removed from the clarifier is returned to the head of the Imhoff tank for treatment. Flow then passes through a baffled chlorine contact chamber where the wastewater is disinfected with gaseous chlorine. Dechlorination is accomplished in an underground tank with sulfur dioxide prior to post step aeration.

The final stage of treatment is accomplished via natural attenuation. After post aeration, the treated effluent flows down the side of the mountain; approximately 186 foot drop in elevation to a collection basin. To ensure that the effluent was reaching the collection basin as intended, the facility conducted dye tests in 1998 and 1999 (see permit file for correspondence/results). These tests indicated that the final effluent was staying within the intended route and collecting in the basin. This basin is the established sampling point for Ammonia, BOD and TSS (composites via automatic sampler), while grab samples for pH, DO and TRC are collected after post aeration prior to the natural attenuation. The basin then discharges through two pipes under the road down the mountain another 50 ft to the property fence line and then continues along to the receiving stream.

See Attachment 2 for a facility schematic/diagram.

TABLE 1 OUTFALL DESCRIPTION							
Outfall Number	Discharge Sources	Treatment	Design Flow	Outfall Latitude and Longitude			
001	Domestic Wastewater	See Item 10 above	0.09 MGD	39° 03' 32" N 77° 52' 53" W			
See Attachment 3 for topographic map.							

## 11. Sludge Treatment and Disposal Methods:

Sludge is anaerobically digested in the Imhoff digester, dewatered on drying beds and hauled to the Frederick County Landfill for final disposal.

# 12. Discharges, Intakes, Monitoring Stations, Other Items in Vicinity of Discharge:

TABLE 2 DISCHARGES, INTAKES & MONITORING STATIONS					
Identification Number	Description				
1APAE-12-LWC	Citizen Monitoring Station – located on Panther Skin Creek, approximately 6.62 miles downstream of Outfall 001.				
1AGOO030.75	DEQ Monitoring Station – located on Goose Creek at the Route 611 (St. Louis Road) bridge, approximately 10.98 miles downstream of Outfall 001.				

# 13. Material Storage:

Materials Description	Volume Stored	Spill/Stormwater Prevention Measures		
Chlorine Gas	150 lb. cylinders	Full cylinders are stored inside the		
Sulfur dioxide	150 lb. cylinders	chlorination/dechlorination building.		

14. Site Inspection: Performed by NRO Staff on 15 May 2007 (see Attachment 4).

# 15. Receiving Stream Water Quality and Water Quality Standards:

## a). Ambient Water Quality Data

There is no monitoring data for the receiving stream. However, there are identified impairments downstream of the discharge for bacteria, benthic and polychlorinated biphenyls (PCBs). Two (2) TMDLs have been approved by the EPA for the Goose Creek watershed; bacterial and benthic which were approved 1 May 2003 (revised 17 June 2004) and 26 April 2004, respectively. A PCB TMDL for the Goose Creek watershed is scheduled for 2018.

Even though the receiving stream was not listed as impaired, all upstream facilities discharging the pollutants of concern were considered and given a Wasteload Allocation. This facility was given a WLA for *E. coli* of 1.57 x 10<sup>11</sup> cfu/year for the bacterial TMDL and a WLA for TSS of 16 tons/year for the benthic TMDL.

#### b). Receiving Stream Water Quality Criteria

Part IX of 9 VAC 25-260 (360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream Jeffries Branch, UT is located within Section 09 of the Potomac River Basin and classified as Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C and maintain a pH of 6.0-9.0 standard units (S.U.).

**Attachment 5** details other water quality criteria applicable to the receiving stream.

## Ammonia:

The receiving stream has a 7Q10 and 1Q10 of 0.0 MGD with no ambient water quality data available. In cases such as this, staff may utilize effluent pH and temperature data to establish the ammonia water quality criteria. Staff used pH effluent data from January 2003 through May 2008 (see **Attachment 6**) and a default temperature value of 25 °C. The subsequent ammonia criteria (see **Attachment 5**) were not significantly different from those established in the previous permit.

# Metals Criteria:

Since the 7Q10 of the receiving stream is zero and no ambient data is available, effluent hardness data may be used to determine the metals criteria. Staff utilized hardness data collected from January 2000 – July 2003. It is staff's best professional judgement that these data are still indicative of the current conditions since there have been no changes in the sources or treatment of the wastewater. The hardness-dependent metals criteria in **Attachment 5** are based on an average effluent value of 173.4 mg/L (**Attachment 7**).

#### Bacteria Criteria:

The Virginia Water Quality Standards (9 VAC 25-260-170 B.) states sewage discharges shall be disinfected to achieve the following criteria:

E. coli bacteria per 100 ml of water shall not exceed the following:

	Geometric Mean <sup>1</sup>	Single Sample Maximum
Freshwater E. coli (N/100 ml)	126	235

<sup>&</sup>lt;sup>1</sup>For two or more samples taken during any calendar month.

# c). Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9 VAC 25-260-360, 370 and 380) designates the river basins, sections, classes and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Jeffries Branch, UT, is located within Section 09 of the Potomac River Basin. This section has not been designated with a special standard.

# d). Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Wood Turtle, Upland Sandpiper (song bird), Loggerhead Shrike (song bird), Bald Eagle, Migrant Loggerhead Shrike (song bird), Henslow's Sparrow (song bird) and the Green Floater (freshwater mussel). The limits proposed in this draft permit are protective of the Virginia Water Quality Standards; therefore, protect the threatened and endangered species found near the discharge.

# 16. Antidegradation (9 VAC 25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 based on the critical flow frequencies. The permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

# 17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLAs) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLAs are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency and statistical characteristics of the effluent data.

# a). Effluent Screening

Effluent data obtained from January 2003 to June 2008 Discharge Monitoring Reports have been reviewed and determined to be suitable for evaluation. Please see **Attachment 8** for a summary of effluent data.

# b). Mixing Zones and Wasteload Allocations (WLAs)

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

WLA =  $\frac{C_o \left[Q_e + (f)(Q_s)\right] - \left[(C_s)(f)(Q_s)\right]}{Q_e}$ 

Where: WLA = Wasteload allocation

C<sub>o</sub> = In-stream water quality criteria

 $Q_e$  = Design flow

Q<sub>s</sub> = Critical receiving stream flow

(1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; harmonic mean for carcinogen-human health criteria; 30Q10 for ammonia criteria; and 30Q5 for non-carcinogen human

health criteria)

f = Decimal fraction of critical flow

C<sub>s</sub> = Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the  $C_0$ .

# c). Effluent Limitations Toxic Pollutants, Outfall 001

9 VAC 25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an instream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9 VAC 25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

# 1) Ammonia as N:

Staff reevaluated the effluent pH data and concluded it was not significantly different than what was used previously to derive the ammonia criteria. However, upon deriving the ammonia limits, it was determined that the facility would receive a monthly average of 2.8 mg/L and a weekly average of 4.0 mg/L (see **Attachment 9**); resulting in relaxed limits compared to the current monthly and weekly averages of 2.1 mg/L and 3.0 mg/L, respectively. Due to antibacksliding provisions, the existing ammonia limitations are proposed to continue in the reissued permit.

## 2) Total Residual Chlorine:

Chlorine is used for disinfection and is potentially in the discharge. Staff calculated WLAs for TRC using current critical flows. In accordance with current DEQ agency guidance, staff used a default data point of 0.2 mg/L and the calculated WLAs to derive the limits. A monthly average of 0.008 mg/L and a weekly average limit of 0.010 mg/L are proposed for this discharge (see **Attachment 10**).

# 3) Tributyltin:

Tributyltin was found during Appendix A monitoring for the 2003 permit reissuance application. It was staff's best professional judgement that the facility would monitor during the current permit cycle in order to collect additional data. This data would be utilized to ascertain if a limit was necessary. All of the reported values during this monitoring period were below the quantification level ('QL'); therefore no limit is needed (**Attachment 11**).

# 4) Total Petroleum Hydrocarbons (TPH):

During the 15 May 2007 site visit, NRO staff learned that an Oil/Water Separator, located in the motor pool building, is connected to the sanitary sewer. It is staff's best professional judgement that the facility monitor for TPH to insure that the O/W Separator is functioning properly and is being maintained. A maximum monthly limit of 15 mg/L is proposed. This limit is based on the current VPDES Permit Manual, agency guidance and the ability of an O/W Separator to recover free petroleum product.

# d). Effluent Limitations and Monitoring, Outfall 001 – Conventional and Non-Conventional Pollutants

No changes to Dissolved Oxygen (D.O.), Biochemical Oxygen Demand-5 day (BOD<sub>5</sub>), Total Suspended Solids (TSS), Total Petroleum Hydrocarbons (TPH), Ammonia, *E. coli* and pH limitations are proposed.

Dissolved Oxygen and BOD<sub>5</sub> limitations are based on the stream modeling dated 15 April 1975 (**Attachment 12**) and are set to meet the water quality criteria for D.O. in the receiving stream.

It is staff's practice to equate the TSS limits with the BOD<sub>5</sub> limits since the two pollutants are closely related in terms of treatment of domestic sewage.

pH limitations are set at the water quality criteria.

E. coli limitations are in accordance with the Water Quality Standards 9 VAC25-260-170.

# e). Effluent Limitations and Monitoring Summary

The effluent limitations are presented in the following table. Limits were established for BOD<sub>5</sub>, Total Suspended Solids, Ammonia, pH, Dissolved Oxygen, Total Residual Chlorine and *E. coli*.

The limit for Total Suspended Solids is based on Best Professional Judgement.

The mass loading (kg/d) for monthly and weekly averages were calculated by multiplying the concentration values (mg/L), with the flow values (in MGD) and a conversion factor of 3.785.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

# 18. Antibacksliding:

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

# 19. Effluent Limitations/Monitoring Requirements:

Design flow is 0.09 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR	DISCHARGE LIMITATIONS  MONITORING REQUIREMENTS							
	LIMITS	<u>Monthly</u>	Monthly Average		Weekly Average N		<u>Maximum</u>	Frequency	
Flow (MGD)	NA	N	NL		A	N/A	NL	Continuous	TIRE
pH	3	N	/A	N/	A	6.0 S.U.	9.0 S.U.	1/D	Grab
$BOD_5$	3,6	23 mg/L	7.8 kg/day	35 mg/L	12 kg/day	N/A	N/A	1/W	4H-C
Total Suspended Solids (TSS)	2,4	23 mg/L	23 mg/L 7.8 kg/day		12 kg/day	N/A	N/A	1/W	4H-C
DO 3		N/A		N/	A	6.0 mg/L	N/A	1/D	Grab
Ammonia, as N	3	2.1 mg/L		3.0 n	ng/L	N/A	N/A	1/W	4H-C
E. coli (Geometric Mean)	3,4	126 n/100mL		N/	A	N/A	N/A	1/W	Grab
Total Residual Chlorine (after contact tank)	2,5	N/A		N/	A	1.0 mg/L	N/A	3/D at 4-hr intervals	Grab
Total Residual Chlorine (after dechlorination)	3	0.008 mg/L		0.010	mg/L	N/A	N/A	1/D	Grab
Total Petroleum Hydrocarbon*	2	N/A		N/	A	N/A	15 mg/L	1/M	Grab
The basis for the limitations coo	MGD = Million gallons per day.				3/D = Three times every day.				
1. Federal Effluent Requirements		N/A = Not ap	plicable.			1/D = Once every day.			
2. Best Professional Judgement		$NL = No \lim_{n \to \infty} \frac{1}{n} \int_{-\infty}^{\infty} \frac{1}{n} dx$	it; monitor and	l report.		1/W = Once every week.			
3. Water Quality Standards			S.U. = Standa	rd units.			1/M =	Once every mor	nth.
<ol> <li>Applicable Goose Creek Water</li> </ol>	TIRE = Totalizing, indicating and recording equipment.								

- 5. DEQ Disinfection Guidance
- 6. Stream Model Attachment 12
- 4H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 4-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of four (4) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum four (4) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.
- Grab = An individual sample collected over a period of time not to exceed 15-minutes.
  - \*Total Petroleum Hydrocarbons (TPH) shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

# 20. Other Permit Requirements:

Part I.B. of the permit contains additional chlorine monitoring requirements, quantification levels and compliance reporting instructions

Minimum chlorine residual must be maintained at the exit of the chlorine contact tank to assure adequate disinfection. No more than nine (9) of the monthly test results for TRC at the exit of the chlorine contact tank shall be < 1.0 mg/L with any TRC < 0.6 mg/L considered a system failure. *E. coli* limits are defined in this section as well as monitoring requirements to take effect should an alternate means of disinfection be used.

9 VAC 25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9 VAC 25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

#### 21. Other Special Conditions:

- a) 95% Capacity Reopener. The VPDES Permit Regulation at 9 VAC 25-31-200.B.2. requires all POTWs and PVOTWs develop and submit a plan of action to DEQ when the monthly average influent flow to their sewage treatment plant reaches 95% or more of the design capacity authorized in the permit for each month of any three consecutive month period.
- b) <u>Indirect Dischargers</u>. Required by VPDES Permit Regulation, 9 VAC 25-31-280 B.9 for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.
- c) O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790; VPDES Permit Regulation, 9 VAC 25-31-190.E. On or before 19 December 2008, the permittee shall submit for approval an Operations and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO). Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- d) <u>CTC, CTO Requirement</u>. The Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790 requires that all treatment works treating wastewater obtain a Certificate to Construct prior to commencing construction and to obtain a Certificate to Operate prior to commencing operation of the treatment works.
- e) <u>Licensed Operator Requirement</u>. The Code of Virginia at §54.1-2300 et seq. and the VPDES Permit Regulation at 9 VAC 25-31-200 D, and Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators. This facility requires a Class III operator.
- f) Reliability Class. The Sewage Collection and Treatment Regulation at 9 VAC 25-790 requires sewerage works achieve a certain level of reliability in order to protect water quality and public health consequences in the event of component or system failure. The facility is required to meet reliability Class of II.
- g) <u>Sludge Reopener</u>. The VPDES Permit Regulation at 9 VAC 25-31-200.C.4. requires all permits issued to treatment works treating domestic sewage (including sludge-only facilities) include a reopener clause allowing incorporation of any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the CWA. The facility includes a sewage treatment works.
- h) <u>Sludge Use and Disposal</u>. The VPDES Permit Regulation at 9 VAC 25-31-100.P., 220.B.2., and 420-720, and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on their sludge use and disposal practices and to meet specified standards for sludge use and disposal. The facility includes a treatment works treating domestic sewage.

#### 22. Permit Section Part II:

Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

# 23. Changes to the Permit from the Previously Issued Permit:

- a) Special Conditions:
  - -The Tributyltin (TBT) Source Identification and Elimination special condition was removed with this reissuance.
- b) Monitoring and Effluent Limitations:
  - -Tributyltin monitoring has been removed with this reissuance.
  - -TPH has been added with this reissuance.

# 24. Variances/Alternate Limits or Conditions: None.

#### 25. Public Notice Information:

First Public Notice Date: 20 August 2008 Second Public Notice Date: 27 August 2008

Public Notice Information is required by 9 VAC 25-31-280 B. All pertinent information is on file and may be inspected and copied by contacting the: Northern DEQ Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3873, ddfrasier@deq.virginia.gov. See **Attachment 13** for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a comp lete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

# 26. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):

There are identified impairments downstream of the discharge for bacteria, benthic and polychlorinated biphenyls (PCBs). Two (2) TMDLs were approved by the EPA for the Goose Creek watershed; bacterial and benthic which were approved 1 May 2003 (revised 17 June 2004) and 26 April 2004, respectively. This facility was given a WLA for *E. coli* of 1.57 x 10<sup>11</sup> cfu/year for the bacterial TMDL and a WLA for TSS of 16 tons/year for the benthic TMDL. The proposed limitations for both *E. coli* and Total Suspended Solids (TSS) should not contribute to the downstream impairments.

TMDL Reopener: This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL that may be developed and approved for the receiving stream.

# 27. Additional Comments:

Previous Board Action(s): None.

Staff Comments: None.

Public Comment: No comments were received during the public notice.

EPA Checklist: The checklist can be found in **Attachment 14**.

# Fact Sheet Attachments Table of Contents

# FEMA – Mount Weather Emergency Operations Center VA0024759 2008 Reissuance

Attachment 1	Flow Frequency Determination
Attachment 2	Facility Schematic/Diagram
Attachment 3	Topographic Map
Attachment 4	Site Visit Report
Attachment 5	Wasteload Allocation Analyses
Attachment 6	Effluent pH Data
Attachment 7	Effluent Hardness Data
Attachment 8	2003 – 2008 Effluent Data
Attachment 9	Ammonia Limit Derivation
Attachment 10	Total Residual Chlorine Limit Derivation
Attachment 11	TributyItin Data
Attachment 12	Stream Model – 15 April 1975
Attachment 13	Public Notice

Attachment 14 EPA Checklist

#### MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION

Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: Flow Frequency Determination

F.E.M.A. Special Facility - VA#0024759

TO:

James Engbert, NRO

FROM:

Paul E. Herman, P.E., WQAP

DATE:

March 24, 1998

COPIES:

Ron Gregory, Charles Martin, File

RECEIVE

MAR 25 1998

Northarn VA. Region Dept. of Env. Quality

The F.E.M.A. Special Facility discharges to an unnamed tributary of Jeffries Branch near Mt. Weather, VA. Stream flow frequencies are required at this site for use by the permit writer in developing effluent limitations for the VPDES permit.

At the discharge point, the receiving stream is shown to be intermittent on the USGS Ashby Gap Quadrangle topographic map. The flow frequencies for intermittent streams are 0.0 cfs for the 1010, 7010, 3005, high flow 1010, high flow 7010, and harmonic mean. For modeling purposes, flow frequencies have been determined for the first perennial reach downstream from the discharge point. The perennial point is located at the confluence of the intermittent stream and Jeffries Branch.

The VDEQ operated a continuous record gage on the Goose Creek near Middleburg, VA (#01634700) from 1966 to 1996. The gage was located at the Route 611 bridge in Loudoun County, VA. The flow frequencies for the gage and the discharge point are presented below. The values at the discharge point were determined by drainage area proportions and do not address any withdrawals, discharges, or springs lying upstream.

# Goose Creek near Middleburg, VA (#01634700):

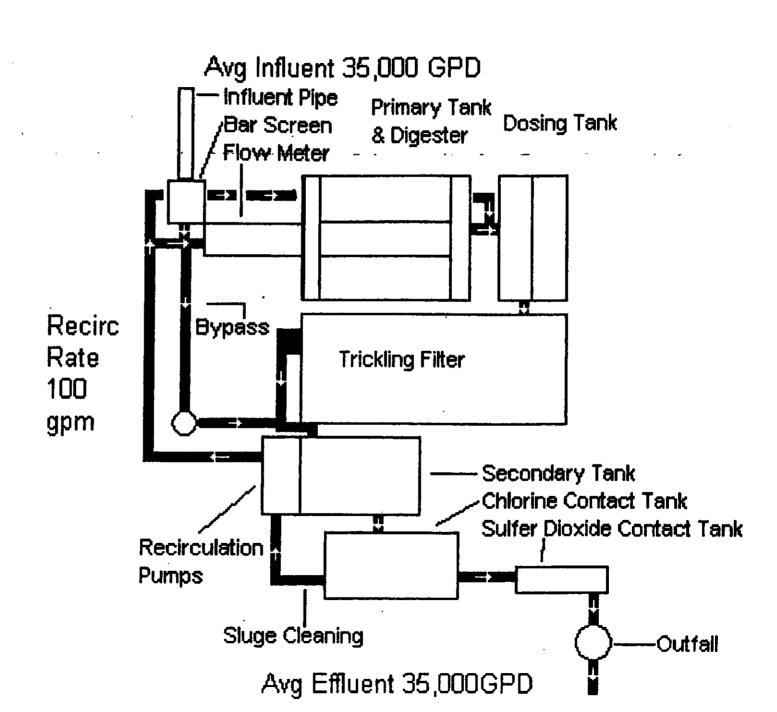
Drainage Area = 123 mi<sup>2</sup>

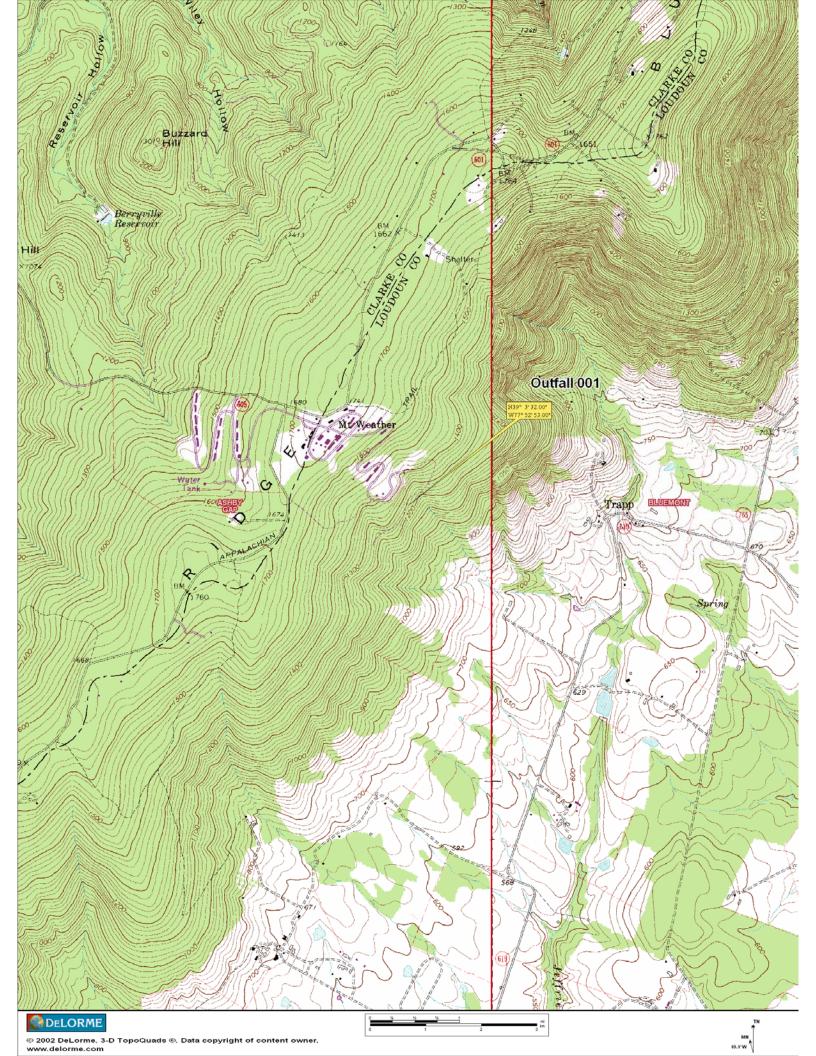
1Q10 = 0.0 cfs High Flow 1Q10 = 8.6 cfs 7Q10 = 0.0037 cfs High Flow 7Q10 = 11 cfs 30Q5 = 1.55 cfs HM = 0.0 cfs

# Jeffries Branch above intermittent stream:

Drainage Area = 1.63 mi<sup>2</sup> 1010 = 0.0 cfs = 0.460 High Flow 1010 = 0.11 cfs = 0.071093 /At 7010 = 0.0 cfs = 0.060 High Flow 7010 = 0.15 cfs = 0.09(A45) 3005 = 0.02 cfs = 0.012926 AGD HM = 0.0 cfs = 0.000 AGD

The high flow months are December through May. If you have any questions concerning this analysis, please let me know.







# NORTHERN VIRGINIA REGIONAL OFFICE 13901 CROWN COURT, WOODBRIDGE, VA. 22193 PHONE: (703) 583–3870 FAX: (703) 583–3871

# SITE INSPECTION REPORT

FA	ACILITY NAME:	FEMA – Bluemont; Mt. Weather							
PEF	RMIT NUMBER:	VA0091464		INSPECTION DATE: May 15, 2007		ay 15, 2007	REPORT DATE:	June 13, 2007	
	INSPECTOR:	Sharon	Mack		REVIEWER			DATE	
PR	RESENT AT INSF	PECTION:			rt, Anna Westerni Ilis, Tom Kane, Ha			er Mango, David S	Smith
Ins	pection Ty	pe:							
	Compliance	WL/NOV#	:			Announced			
	Sampling Scheduled								
Х	X Other: Recon								

# **Observation Section:**

- Arrived on site at 1015. Weather warm and partly sunny.
- > We met Kathy Ellis, Environmental Engineer, at the Visitor Center and were escorted to the Conference Room.
- ➤ Met Tom Kane, Senior Advisor; Harold Rohde, Civil Engineer; Peter Mango, Supervisory Civil Engineering technician; and David Smith, Assistant Fire Chief. Discussed the facility's property and layout.
- ➤ Discussed the backwash water discharge from the Water Treatment Plant (WTP). The filters are backwashed once every 2-3 weeks, with a discharge flow of ~ 30,000 gal. Twice a year the system is cleaned out, resulting in a discharge of about 250,000 gallons. The current detention pond capacity is ~ 336,000 gal.
- ➤ Currently the backwash water discharges to a large pond that also collects stormwater runoff. The pond's current capacity is ~ 336,000 gal.

- ➤ The samples from Outfall 101, the discharge pipe from the WTP, should be collected before the water mixes with stormwater. We discussed building a berm across pond near the influent pipe from the WTP and collecting samples from that side. A pipe/ flapper valve would allow water into the stormwater side of pond.
- ➤ Water from the pond discharges to a channel that eventually exits the property at Outfall 001.
- > Discussed revisions to be made to the Storm Water Pollution Prevention Plan (SWPPP) so it fully meets permit requirements.
- Received the 1<sup>st</sup> Quarter 2007 ground water sampling monitoring report that was due April 10, 2007.
- > Toured the property to look at all outfalls for Industrial Discharge Permit VA0091464.
- > Stopped at backwash water retention pond and looked at Outfall 101.
- > Stopped at Outfall 001 samples are currently taken outside the property fence, but the sample location will be changed to site seen in photo 3 once the culvert is replaced.
- ➤ Walked around the roads and grounds and paint shop buildings. Three unmarked 55 gallon drums containing liquid were found behind the building. The ground around one of the drums was stained, indicating a spill (photos 7 and 8).
- Stopped at permitted outfalls 201 and 002.
- Stopped at the Wastewater Treatment Plant (VA0024759) and looked at Outfall 001. Construction around the outfall has been completed. Tadpoles were swimming in the pond formed by the WWTP discharge water.
- > Silt fence from construction activities was seen still in place blow Outfall 001 for the STP. It should be removed before it is beaten down and buried by the elements and the area is overgrown.
- Stopped at the motor pool. Vehicles are power washed with water and biodegradable soap on the grass outside the building; any vehicles hand-washed inside the building with water only. The building's floor drains discharge into an oil-water separator and then to the sanitary sewer system.
- > Walked around the building housing the HVAC and electrical shops.
- Walked the perimeter of the storage yard. An unmarked 55 gallon drum containing fluid was seen on site. Kathy mentioned that she did have a problem with such drums being dropped off for disposal without proper notification or identification, resulting in extra expense to identify the contents before disposal.
- A trail of road salt was discovered running from a broken slat in the side of the salt storage building down a slope into a dry creek. The front of the storage building is open to the elements; observations indicate that stormwater washes the salt out through the broken slat and around the open front of the building. Water and salt then flow down the slope and into the creek, which would channel stormwater runoff in wet conditions. Salt was observed in the creek bed.
- > Hazardous materials such as batteries and acids are stored inside hazmat sheds with spill containment capacity.

- ➤ Had a short exit interview at the storage yard, then Kathy took us back to the visitor center to sign out.
- > Departed facility at 1500.

# **PHOTOGRAPH LOG**

- > Photos taken by Kathy Ellis
- ➤ Photos can be located on the DEQ U drive @ Photos Water Facilities FEMA- Mt. Weather 05-15-07
- > Photos are included with this report.

# **Compliance Section:**

# DMR VIOLATION(S):

None

# **INSPECTION REQUIREMENTS:**

- Supply the DEQ with an Operations and Maintenance Manual in accordance with the Industrial Stormwater Discharge Permit (#VA0091464, Part I, Letter E) and distinct from the Stormwater Pollution Prevention Plan (SWPPP).
- > Enclose the open front of the salt storage building to prevent stormwater from entering and washing salt out of the building and, specifically, into the intermittent creek bed.

# INSPECTION VIOLATION(S):

- ➤ Road salt is being carried out of the storage building and into the nearby intermittent creek by stormwater (photos 10-12).
- > Unmarked 55 gallon drums containing liquid found behind the roads and grounds/paint shop building (photo 7) and at the waste yard.
- > Evidence of product leaks on ground around unmarked drums behind paint shop (photo 8).

# **Sampling Section: NA**

# FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: FEMA - Bluemont STP Permit No.: VA0024759

Receiving Stream: Jeffries Branch, UT Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information				Stream Flows			
Mean Hardness (as CaCO3) =		mg/L		1Q10 (Annual) =	0	MGD	
90% Temperature (Annual) =		deg C		7Q10 (Annual) =	0	MGD	
90% Temperature (Wet season) =		deg C		30Q10 (Annual) =	0	MGD	
90% Maximum pH =		SU		1Q10 (Wet season) =	0	MGD	
10% Maximum pH =		SU		30Q10 (Wet season)	0	MGD	
Tier Designation (1 or 2) =	1			30Q5 =	0	MGD	
Public Water Supply (PWS) Y/N? =	n			Harmonic Mean =	0	MGD	
Trout Present Y/N? =	n			Annual Average =	0	MGD	
Early Life Stages Present Y/N? =	у						

Mixing Information	Effluent		
Annual - 1Q10 Mix =	100	%	Mean Ha
- 7Q10 Mix =	100	%	90% Ter
- 30Q10 Mix =	100	%	90% Ter
Wet Season - 1Q10 Mix =	100	%	90% Ma
- 30Q10 Mix =	100	%	10% Ma

Effluent Information		
Mean Hardness (as CaCO3) =	173.4	mg/L
90% Temp (Annual) =	25	deg C
90% Temp (Wet season) =		deg C
90% Maximum pH =	7.6	SU
10% Maximum pH =		SU
Discharge Flow =	0.09	MGD

Parameter	Background		Water Qual	lity Criteria			Wasteload	Allocations		Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН
Acenapthene	0			na	2.7E+03			na	2.7E+03											na	2.7E+03
Acrolein	0			na	7.8E+02			na	7.8E+02											na	7.8E+02
Acrylonitrile <sup>C</sup>	0			na	6.6E+00			na	6.6E+00											na	6.6E+00
Aldrin <sup>C</sup> Ammonia-N (mg/l)	0	3.0E+00		na	1.4E-03	3.0E+00		na	1.4E-03									3.0E+00		na	1.4E-03
(Yearly) Ammonia-N (mg/l)	0	1.70E+01	2.02E+00	na			2.0E+00	na			-							1.7E+01	2.0E+00	na	
(High Flow)	0	1.70E+01	3.98E+00	na		1.7E+01	4.0E+00	na										1.7E+01	4.0E+00	na	
Anthracene	0			na	1.1E+05			na	1.1E+05											na	1.1E+05
Antimony	0			na	4.3E+03			na	4.3E+03											na	4.3E+03
Arsenic	0	3.4E+02	1.5E+02	na		3.4E+02	1.5E+02	na										3.4E+02	1.5E+02	na	
Barium	0			na				na												na	
Benzene <sup>C</sup>	0			na	7.1E+02			na	7.1E+02											na	7.1E+02
Benzidine <sup>C</sup>	0			na	5.4E-03			na	5.4E-03											na	5.4E-03
Benzo (a) anthracene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Benzo (b) fluoranthene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Benzo (k) fluoranthene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Benzo (a) pyrene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Bis2-Chloroethyl Ether	0			na	1.4E+01			na	1.4E+01											na	1.4E+01
Bis2-Chloroisopropyl Ether	0			na	1.7E+05			na	1.7E+05											na	1.7E+05
Bromoform <sup>C</sup>	0			na	3.6E+03			na	3.6E+03											na	3.6E+03
Butylbenzylphthalate	0			na	5.2E+03			na	5.2E+03											na	5.2E+03
Cadmium	0	7.3E+00	1.7E+00	na		7.3E+00	1.7E+00	na										7.3E+00	1.7E+00	na	
Carbon Tetrachloride <sup>C</sup>	0			na	4.4E+01			na	4.4E+01										_	na	4.4E+01
Chlordane <sup>C</sup>	0	2.4E+00	4.3E-03	na	2.2E-02	2.4E+00	4.3E-03	na	2.2E-02									2.4E+00	4.3E-03	na	2.2E-02
Chloride	0	8.6E+05	2.3E+05	na			2.3E+05	na										8.6E+05	2.3E+05	na	
TRC	0	1.9E+01	1.1E+01	na			1.1E+01	na										1.9E+01	1.1E+01	na	
Chlorobenzene	0			na	2.1E+04			na	2.1E+04											na	2.1E+04

Parameter	Background		Water Qua	lity Criteria			Wasteload	Allocation	s		Antidegrada	tion Baseline		A	ntidegradati	on Allocations			Most Limiti	ng Allocation	s
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН
Chlorodibromomethane <sup>C</sup>	0			na	3.4E+02			na	3.4E+02											na	3.4E+02
Chloroform <sup>C</sup>	0			na	2.9E+04			na	2.9E+04											na	2.9E+04
2-Chloronaphthalene	0			na	4.3E+03			na	4.3E+03											na	4.3E+03
2-Chlorophenol	0			na	4.0E+02			na	4.0E+02											na	4.0E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na		8.3E-02	4.1E-02	na										8.3E-02	4.1E-02	na	
Chromium III	0	8.9E+02	1.2E+02	na		8.9E+02	1.2E+02	na										8.9E+02	1.2E+02	na	
Chromium VI	0	1.6E+01	1.1E+01	na		1.6E+01	1.1E+01	na										1.6E+01	1.1E+01	na	
Chromium, Total	0			na				na												na	
Chrysene C	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Copper	0	2.3E+01	1.4E+01	na		2.3E+01	1.4E+01	na										2.3E+01	1.4E+01	na	
Cyanide	0	2.2E+01	5.2E+00	na	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05									2.2E+01	5.2E+00	na	2.2E+05
DDD <sup>C</sup>	0			na	8.4E-03			na	8.4E-03											na	8.4E-03
DDE <sup>C</sup>	0			na	5.9E-03			na	5.9E-03											na	5.9E-03
DDT <sup>C</sup>	0	1.1E+00	1.0E-03	na	5.9E-03	1.1E+00	1.0E-03	na	5.9E-03									1.1E+00	1.0E-03	na	5.9E-03
Demeton	0		1.0E-01	na			1.0E-01	na											1.0E-01	na	-
Dibenz(a,h)anthracene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Dibutyl phthalate	0			na	1.2E+04			na	1.2E+04											na	1.2E+04
Dichloromethane					,				,												
(Methylene Chloride) C	0			na	1.6E+04			na	1.6E+04											na	1.6E+04
1,2-Dichlorobenzene	0			na	1.7E+04			na	1.7E+04											na	1.7E+04
1,3-Dichlorobenzene	0			na	2.6E+03			na	2.6E+03											na	2.6E+03
1,4-Dichlorobenzene	0			na	2.6E+03			na	2.6E+03											na	2.6E+03
3,3-Dichlorobenzidine <sup>C</sup>	0			na	7.7E-01			na	7.7E-01											na	7.7E-01
Dichlorobromomethane <sup>C</sup>	0			na	4.6E+02			na	4.6E+02											na	4.6E+02
1,2-Dichloroethane <sup>C</sup>	0			na	9.9E+02			na	9.9E+02											na	9.9E+02
1,1-Dichloroethylene	0			na	1.7E+04			na	1.7E+04											na	1.7E+04
1,2-trans-dichloroethylene	0			na	1.4E+05			na	1.4E+05											na	1.4E+05
2,4-Dichlorophenol	0			na	7.9E+02			na	7.9E+02											na	7.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0			na				na												na	
1,2-Dichloropropane <sup>C</sup>	0	_		na	3.9E+02	_		na	3.9E+02		_						_		_	na	3.9E+02
1,3-Dichloropropene	0			na	1.7E+03			na	1.7E+03								_			na	1.7E+03
Dieldrin <sup>C</sup>	0	2.4E-01	5.6E-02		1.4E-03	2.4E-01	5.6E-02		1.4E-03									2.4E-01	5.6E-02		1.4E-03
Diethyl Phthalate	0	2.4L-01	J.UE-UZ	na na	1.4E-05	2.46-01	3.0L-02 	na na	1.4L-03									2.46-01	3.0E-02	na na	1.4E-05
Di-2-Ethylhexyl Phthalate <sup>C</sup>	0			na	5.9E+01	_		na	5.9E+01		_						_		-	na	5.9E+01
2,4-Dimethylphenol	0			na	2.3E+03			na	2.3E+01											na	2.3E+03
Dimethyl Phthalate	0			na	2.9E+06			na	2.9E+06									l .	- <b>-</b>	na	2.9E+06
Di-n-Butyl Phthalate	0			na na	2.9E+06 1.2E+04	-		na na	2.9E+06 1.2E+04		-		-				-			na na	1.2E+04
2,4 Dinitrophenol	0			na	1.4E+04				1.4E+04				-				_	<u> </u>		na	1.4E+04
2-Methyl-4,6-Dinitrophenol	0			na na	7.65E+02			na	7.7E+02		-		-				_	l .			7.7E+02
2,4-Dinitrotoluene <sup>C</sup>								na			-		-				-			na	
Dioxin (2,3,7,8-	0			na	9.1E+01			na	9.1E+01									-	-	na	9.1E+01
tetrachlorodibenzo-p- dioxin) (ppq)	0			na	1.2E-06			na	na											na	na
1,2-Diphenylhydrazine <sup>C</sup>	0			na	5.4E+00			na	5.4E+00											na	5.4E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02								_	2.2E-01	5.6E-02	na	2.4E+02
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02								_	2.2E-01	5.6E-02	na	2.4E+02
Endosulfan Sulfate	0			na	2.4E+02			na	2.4E+02											na	2.4E+02
Endrin	0	8.6E-02	3.6E-02	na	8.1E-01	8.6E-02	3.6E-02	na	8.1E-01								_	8.6E-02	3.6E-02	na	8.1E-01
Endrin Aldehyde	0	0.0L-02	J.UL-UZ	na	8.1E-01	0.0L-02	3.0L-02	na	8.1E-01								_		3.0L-02	na	8.1E-01
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Parameter	Background		Water Qual	lity Criteria			Wasteload	Allocations			Antidegradat	tion Baseline		An	tidegradatio	n Allocations			Most Limiti	ng Allocations	s
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН
Ethylbenzene	0			na	2.9E+04			na	2.9E+04		-									na	2.9E+04
Fluoranthene	0			na	3.7E+02			na	3.7E+02											na	3.7E+02
Fluorene	0			na	1.4E+04			na	1.4E+04											na	1.4E+04
Foaming Agents	0			na				na												na	
Guthion	0		1.0E-02	na			1.0E-02	na											1.0E-02	na	
Heptachlor <sup>C</sup>	0	5.2E-01	3.8E-03	na	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03		_							5.2E-01	3.8E-03	na	2.1E-03
Heptachlor Epoxide <sup>C</sup>	0	5.2E-01	3.8E-03	na	1.1E-03	5.2E-01	3.8E-03	na	1.1E-03		_							5.2E-01	3.8E-03	na	1.1E-03
Hexachlorobenzene <sup>C</sup>	0			na	7.7E-03			na	7.7E-03		_									na	7.7E-03
Hexachlorobutadiene <sup>C</sup>	0			na	5.0E+02			na	5.0E+02		_								_	na	5.0E+02
Hexachlorocyclohexane	O			na .	0.02.02			iid	0.02.02												0.02.02
Alpha-BHC <sup>C</sup>	0			na	1.3E-01			na	1.3E-01											na	1.3E-01
Hexachlorocyclohexane																					
Beta-BHC <sup>C</sup>	0			na	4.6E-01			na	4.6E-01											na	4.6E-01
Hexachlorocyclohexane Gamma-BHC <sup>C</sup> (Lindane)	0	0.55.04			0.05.04	0.55.04			C 2E 04									0.55.04			6.05.04
Gamma-BHC (Linualie)	0	9.5E-01	na	na	6.3E-01	9.5E-01		na	6.3E-01									9.5E-01		na	6.3E-01
Hexachlorocyclopentadiene	0			na	1.7E+04			na	1.7E+04											na	1.7E+04
Hexachloroethane <sup>C</sup>	0			na	8.9E+01			na	8.9E+01											na	8.9E+01
Hydrogen Sulfide	0		2.0E+00	na			2.0E+00	na											2.0E+00	na	
Indeno (1,2,3-cd) pyrene <sup>C</sup>	0			na	4.9E-01			na	4.9E-01											na	4.9E-01
Iron	0			na				na												na	
Isophorone <sup>C</sup>	0			na	2.6E+04			na	2.6E+04											na	2.6E+04
Kepone	0		0.0E+00	na			0.0E+00	na											0.0E+00	na	
Lead	0	2.4E+02	2.7E+01	na		2.4E+02	2.7E+01	na										2.4E+02	2.7E+01	na	
Malathion	0		1.0E-01	na			1.0E-01	na											1.0E-01	na	
Manganese	0			na				na												na	
Mercury	0	1.4E+00	7.7E-01	na	5.1E-02	1.4E+00	7.7E-01	na	5.1E-02									1.4E+00	7.7E-01	na	5.1E-02
Methyl Bromide	0			na	4.0E+03			na	4.0E+03											na	4.0E+03
Methoxychlor	0		3.0E-02	na			3.0E-02	na											3.0E-02	na	
Mirex	0		0.0E+00	na			0.0E+00	na											0.0E+00	na	
Monochlorobenzene	0			na	2.1E+04			na	2.1E+04											na	2.1E+04
Nickel	0	2.9E+02	3.2E+01	na	4.6E+03	2.9E+02	3.2E+01	na	4.6E+03									2.9E+02	3.2E+01	na	4.6E+03
Nitrate (as N)	0	2.9L+02	J.ZE+01	na	4.0L+03	2.9L+02	3.2L+01	na										2.92+02	3.2E+01		4.02+03
					1.9E+03				1.05.03									-	-	na	1.9E+03
Nitrobenzene N-Nitrosodimethylamine <sup>C</sup>	0			na				na	1.9E+03										-	na	
N-Nitrosodimetriylamine  N-Nitrosodiphenylamine	0			na	8.1E+01			na	8.1E+01										-	na	8.1E+01
	0			na	1.6E+02			na	1.6E+02										-	na	1.6E+02
N-Nitrosodi-n-propylamine <sup>C</sup>	0			na	1.4E+01			na	1.4E+01											na	1.4E+01
Parathion	0	6.5E-02	1.3E-02	na		6.5E-02	1.3E-02	na										6.5E-02	1.3E-02	na	
PCB-1016	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1221	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1232	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1242	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1248	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1254	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB-1260	0		1.4E-02	na			1.4E-02	na											1.4E-02	na	
PCB Total <sup>C</sup>	0	-		na	1.7E-03			na	1.7E-03	-										na	1.7E-03

Parameter	Background		Water Qual	lity Criteria			Wasteload	Allocations			Antidegrada	ation Baseline		А	ntidegradati	on Allocations		Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	НН	Acute	Chronic I	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН	Acute	Chronic	HH (PWS)	НН
Pentachlorophenol <sup>C</sup>	0	7.7E-03	5.9E-03	na	8.2E+01	7.7E-03	5.9E-03	na	8.2E+01									7.7E-03	5.9E-03	na	8.2E+01
Phenol	0			na	4.6E+06			na	4.6E+06											na	4.6E+06
Pyrene	0			na	1.1E+04			na	1.1E+04											na	1.1E+04
Radionuclides (pCi/l	0			20				20													
except Beta/Photon)				na				na											-	na	4 55 : 04
Gross Alpha Activity Beta and Photon Activity	0	-		na	1.5E+01			na	1.5E+01											na	1.5E+01
(mrem/yr)	0			na	4.0E+00			na	4.0E+00											na	4.0E+00
Strontium-90	0			na	8.0E+00			na	8.0E+00											na	8.0E+00
Tritium	0			na	2.0E+04			na	2.0E+04											na	2.0E+04
Selenium	0	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04									2.0E+01	5.0E+00	na	1.1E+04
Silver	0	8.9E+00		na		8.9E+00		na										8.9E+00		na	
Sulfate	0			na				na												na	
1,1,2,2-Tetrachloroethane <sup>C</sup>	0			na	1.1E+02			na	1.1E+02											na	1.1E+02
Tetrachloroethylene <sup>C</sup>	0			na	8.9E+01			na	8.9E+01											na	8.9E+01
Thallium	0			na	6.3E+00			na	6.3E+00											na	6.3E+00
Toluene	0			na	2.0E+05			na	2.0E+05											na	2.0E+05
Total dissolved solids	0			na				na												na	
Toxaphene <sup>C</sup>	0	7.3E-01	2.0E-04	na	7.5E-03	7.3E-01	2.0E-04	na	7.5E-03									7.3E-01	2.0E-04	na	7.5E-03
Tributyltin	0	4.6E-01	6.3E-02	na		4.6E-01	6.3E-02	na										4.6E-01	6.3E-02	na	
1,2,4-Trichlorobenzene	0			na	9.4E+02			na	9.4E+02											na	9.4E+02
1,1,2-Trichloroethane <sup>C</sup>	0			na	4.2E+02			na	4.2E+02											na	4.2E+02
Trichloroethylene <sup>C</sup>	0			na	8.1E+02			na	8.1E+02											na	8.1E+02
2,4,6-Trichlorophenol <sup>C</sup>	0			na	6.5E+01			na	6.5E+01											na	6.5E+01
2-(2,4,5-Trichlorophenoxy)																					
propionic acid (Silvex)	0			na				na												na	
Vinyl Chloride <sup>C</sup>	0			na	6.1E+01			na	6.1E+01								-			na	6.1E+01
Zinc	0	1.9E+02	1.9E+02	na	6.9E+04	1.9E+02	1.9E+02	na	6.9E+04									1.9E+02	1.9E+02	na	6.9E+04

#### Notes:

- 1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- 2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
- 3. Metals measured as Dissolved, unless specified otherwise
- 4. "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
  Antidegradation WLAs are based upon a complete mix.
- 6. Antideg. Baseline = (0.25(WQC background conc.) + background conc.) for acute and chronic
  - = (0.1(WQC background conc.) + background conc.) for human health
- 7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Dioxin. Mixing ratios may be substituted for stream flows where appropriate.

Metal	Target Value (SSTV)
Antimony	4.3E+03
Arsenic	9.0E+01
Barium	na
Cadmium	1.0E+00
Chromium III	7.0E+01
Chromium VI	6.4E+00
Copper	8.6E+00
Iron	na
Lead	1.6E+01
Manganese	na
Mercury	5.1E-02
Nickel	1.9E+01
Selenium	3.0E+00
Silver	3.6E+00
Zinc	7.5E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

# **FEMA - Bluemont STP**

VA0024759

Date	pH (S.U.)
07-Jan-2003	7.3
07-Feb-2003	7.1
10-Mar-2003	7.4
07-Apr-2003	7.1
07-May-2003	7
05-Jun-2003	7.1
09-Jul-2003	7
07-Aug-2003	6.9
11-Sep-2003	7.2
07-Oct-2003	7
07-Nov-2003	7.1
10-Dec-2003	7
12-Jan-2004	7.1
09-Feb-2004	7.5
10-Mar-2004	7.4
08-Apr-2004	7.3
10-May-2004	7.3
08-Jun-2004	7.3
12-Jul-2004	7.3
06-Aug-2004	7.3
07-Sep-2004	7.4
07-Oct-2004	7.4
05-Nov-2004	7.4
08-Dec-2004	7.6
06-Jan-2005	7.6
07-Feb-2005	7.5
08-Apr-2005	7.5
05-May-2005	7.4
06-Jun-2005	7.3
08-Jul-2005	7.4
09-Sep-2005	7.3
07-Oct-2005	7.3
07-Nov-2005	7.4
09-Dec-2005	7.5
06-Feb-2006	7.3
09-Mar-2006	7.3
06-Apr-2006	7.5
05-May-2006	7.4
05-Jun-2006	7.3
05-Jul-2006	7.4
01-Aug-2006	7.4
06-Sep-2006	7.4
02-Oct-2006	7.6
06-Nov-2006	7.4
04-Dec-2006	7.4
03-Jan-2007	7.3
05-Feb-2007	7.3
07-Mar-2007	7.6

Date	pH (S.U.)
01-May-2007	7.4
04-Jun-2007	7.3
02-Jul-2007	7.4
07-Aug-2007	7.5
04-Sep-2007	7.7
01-Oct-2007	7.6
06-Nov-2007	7.5
03-Dec-2007	7.5
02-Jan-2008	7.7
04-Feb-2008	7.7
01-Apr-2008	7.4
06-May-2008	7.4
02-Jun-2008	7.3

90th Percentile:	7	.(	ô
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# **FEMA - Bluemont STP**

VA0024759

Date	Hardness (CaCO3 mg/L)
07-Feb-2000	146
06-Mar-2000	198
10-Apr-2000	178
04-May-2000	164
08-Jun-2000	150
11-Jul-2000	150
07-Sep-2000	164
06-Oct-2000	158
07-Nov-2000	158
08-Dec-2000	160
08-Jan-2001	160
07-Feb-2001	168
09-Mar-2001	170
06-Apr-2001	180
10-May-2001	164
11-Jun-2001	164
09-Jul-2001	160
08-Aug-2001	148
10-Sep-2001	150
12-Oct-2001	174
08-Nov-2001	188
10-Dec-2001	208
08-Jan-2002	216
07-Mar-2002	194
15-Mar-2002	220
05-Apr-2002	200
10-May-2002	188
07-Jun-2002	180
09-Jul-2002	158
08-Aug-2002	168
06-Sep-2002	162
04-Oct-2002	160
12-Nov-2002	174
07-Jan-2003	184
07-Feb-2003	186
10-Mar-2003	200
07-Apr-2003	190
07-May-2003	178
09-Jul-2003	156
07-Aug-2003	162

Mean:	173.4

# DMR QA/QC

# Permit #:VA0024759

Facility:US Federal Emergency Management Agency-Bluemont

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
07-Jan-2003	AMMONIA, AS N	.04	0.72	.08	1.0	NULL	******	.30	2.1	.48	3.0
07-Feb-2003	AMMONIA, AS N	.05	0.72	.08	1.0	NULL	******	.27	2.1	.56	3.0
10-Mar-2003	AMMONIA, AS N	.20	0.72	.23	1.0	NULL	******	1.3	2.1	1.5	3.0
07-Apr-2003	AMMONIA, AS N	.11	0.72	.31	1.0	NULL	******	.47	2.1	1.41	3.0
07-May-2003	AMMONIA, AS N	.14	0.72	.30	1.0	NULL	******	.64	2.1	1.30	3.0
05-Jun-2003	AMMONIA, AS N	.14	0.72	.26	1.0	NULL	******	.84	2.1	1.95	3.0
09-Jul-2003	AMMONIA, AS N	.19	0.72	.44	1.0	NULL	******	.76	2.1	1.65	3.0
07-Aug-2003	AMMONIA, AS N	.06	0.72	.09	1.0	NULL	******	.40	2.1	.70	3.0
11-Sep-2003	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.52	2.1	.90	3.0
07-Oct-2003	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	6.9	2.1	19.0	3.0
07-Nov-2003	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.12	2.1	.15	3.0
10-Dec-2003	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.95	2.1	2.4	3.0
12-Jan-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.14	2.1	.19	3.0
09-Feb-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	2.4	2.1	5.6	3.0
10-Mar-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.5	2.1	4.5	3.0
08-Apr-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.77	2.1	1.2	3.0
10-May-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.22	2.1	.35	3.0
08-Jun-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.6	2.1	1.8	3.0
12-Jul-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.37	2.1	.62	3.0
06-Aug-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.39	2.1	.70	3.0
07-Sep-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.9	2.1	3.6	3.0
07-Oct-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.47	2.1	.72	3.0
05-Nov-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	0.55	2.1	NULL	3.0
08-Dec-2004	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	0.45	2.1	0.56	3.0
06-Jan-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
07-Feb-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.63	2.1	1.20	3.0
07-Mar-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.82	2.1	1.85	3.0
08-Apr-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.73	2.1	1.87	3.0
05-May-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.12	2.1	.48	3.0

Rec'd	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max
08-Jul-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.33	2.1	.70	3.0
04-Aug-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.05	2.1	.21	3.0
09-Sep-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.04	2.1	.21	3.0
07-Oct-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
07-Nov-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td>.38</td><td>3.0</td></ql<>	2.1	.38	3.0
09-Dec-2005	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
06-Feb-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
09-Mar-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.6	2.1	2.3	3.0
06-Apr-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.14	2.1	.36	3.0
05-May-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
05-Jun-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
05-Jul-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
01-Aug-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td>.2</td><td>3.0</td></ql<>	2.1	.2	3.0
06-Sep-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
02-Oct-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
06-Nov-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.59	2.1	1.4	3.0
04-Dec-2006	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
03-Jan-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	5.3	2.1	16.4	3.0
05-Feb-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.8	2.1	4.6	3.0
07-Mar-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.9	2.1	3.7	3.0
04-Apr-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
01-May-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td><ql< td=""><td>3.0</td></ql<></td></ql<>	2.1	<ql< td=""><td>3.0</td></ql<>	3.0
04-Jun-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.4	2.1	1.00	3.0
02-Jul-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.8	2.1	1.9	3.0
07-Aug-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.38	2.1	.62	3.0
04-Sep-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	0.2	2.1	0.2	3.0
01-Oct-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.5	2.1	.8	3.0
06-Nov-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.5	2.1	1.3	3.0
03-Dec-2007	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	<ql< td=""><td>2.1</td><td>.23</td><td>3.0</td></ql<>	2.1	.23	3.0
02-Jan-2008	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.1	2.1	.2	3.0
04-Feb-2008	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.02	2.1	.3	3.0
03-Mar-2008	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	2.0	2.1	2.6	3.0
01-Apr-2008	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	1.27	2.1	2.95	3.0

Rec'd	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max
02-Jun-2008	AMMONIA, AS N	NULL	******	NULL	******	NULL	******	.1	2.1	.4	3.0
07-Jan-2003	BOD5	.29	7.8	.65	12.0	NULL	******	1.6	23	3.6	35
07-Feb-2003	BOD5	.60	7.8	.87	12.0	NULL	******	3.0	23	4.2	35
10-Mar-2003	BOD5	.42	7.8	.60	12.0	NULL	******	2.7	23	3.8	35
07-Apr-2003	BOD5	.51	7.8	.65	12.0	NULL	******	1.9	23	2.3	35
07-May-2003	BOD5	.42	7.8	.73	12.0	NULL	******	2.1	23	3.2	35
05-Jun-2003	BOD5	.74	7.8	1.23	12.0	NULL	******	4.4	23	8.0	35
09-Jul-2003	BOD5	1.1	7.8	1.7	12.0	NULL	******	4.8	23	6.7	35
07-Aug-2003	BOD5	.38	7.8	.47	12.0	NULL	******	2.5	23	2.9	35
11-Sep-2003	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
07-Oct-2003	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
07-Nov-2003	BOD5	0.3	7.8	0.89	11.9	NULL	******	2	23	6	35
10-Dec-2003	BOD5	0.57	7.8	1.4	11.9	NULL	******	3.6	23	8.9	35
12-Jan-2004	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
09-Feb-2004	BOD5	0.31	7.8	0.64	11.9	NULL	******	3.1	23	6.4	35
10-Mar-2004	BOD5	0.87	7.8	3.5	11.9	NULL	******	4.9	23	19.6	35
08-Apr-2004	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
10-May-2004	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
08-Jun-2004	BOD5	0.7	7.8	1.7	11.9	NULL	******	4.3	23	10.0	35
12-Jul-2004	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
06-Aug-2004	BOD5	0.12	7.8	0.46	11.9	NULL	******	1.25	23	5.0	35
07-Sep-2004	BOD5	1.5	7.8	3.1	11.9	NULL	******	11.8	23	24.6	35
07-Oct-2004	BOD5	1.0	7.8	0.6	11.9	NULL	******	2.6	23	4.9	35
05-Nov-2004	BOD5	0.31	7.8	0.59	11.9	NULL	******	3.0	23	6.5	35
08-Dec-2004	BOD5	0.2	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td>2.2</td><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	11.9	NULL	******	2.2	23	<ql< td=""><td>35</td></ql<>	35
06-Jan-2005	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
07-Feb-2005	BOD5	0.23	7.8	0.92	11.9	NULL	******	1.7	23	7.0	35
07-Mar-2005	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
08-Apr-2005	BOD5	0.5	7.8	0.79	11.9	NULL	******	3.9	23	5.9	35
05-May-2005	BOD5	0.1	7.8	0.42	11.9	NULL	******	1.3	23	5.4	35
06-Jun-2005	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
08-Jul-2005	BOD5	0.33	7.8	0	11.9	NULL	******	1.5	23	0	35
04-Aug-2005	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
07.0-4.0005	BOD5	AVG <ql< th=""><th>7.8</th><th><ql< th=""><th>11.9</th><th>MIN NULL</th><th>******</th><th>AVG <ql< th=""><th>23</th><th>MAX <ql< th=""><th>35</th></ql<></th></ql<></th></ql<></th></ql<>	7.8	<ql< th=""><th>11.9</th><th>MIN NULL</th><th>******</th><th>AVG <ql< th=""><th>23</th><th>MAX <ql< th=""><th>35</th></ql<></th></ql<></th></ql<>	11.9	MIN NULL	******	AVG <ql< th=""><th>23</th><th>MAX <ql< th=""><th>35</th></ql<></th></ql<>	23	MAX <ql< th=""><th>35</th></ql<>	35
07-Oct-2005	BOD5				-	NULL	******				
07-Nov-2005		0.36	7.8	1.42	11.9		******	<ql< td=""><td>23</td><td>5.9</td><td>35</td></ql<>	23	5.9	35
09-Dec-2005	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
06-Feb-2006	BOD5	1.3	7.8	3	11.9	NULL	******	10.4	23	25.4	35
09-Mar-2006	BOD5	2.0	7.8	4.1	11.9	NULL	******	15.7	23	35	35
06-Apr-2006	BOD5	0.16	7.8	0.79	11.9	NULL	******	1.4	23	7.2	35
05-May-2006	BOD5	0.13	7.8	0.52	11.9	NULL	******	1.35	23	5.40	35
05-Jun-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
05-Jul-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td></td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td></td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL		<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
01-Aug-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
06-Sep-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
02-Oct-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
06-Nov-2006	BOD5	.32	7.8	1.6	11.9	NULL	******	1.6	23	8.0	35
04-Dec-2006	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
03-Jan-2007	BOD5	1.2	7.8	2.6	11.9	NULL	******	11.4	23	24.0	35
05-Feb-2007	BOD5	.91	7.8	3.4	11.9	NULL	******	5.1	23	17.7	35
07-Mar-2007	BOD5	2.3	7.8	4.7	11.9	NULL	******	20.5	23	42	35
04-Apr-2007	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
01-May-2007	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
04-Jun-2007	BOD5	.12	7.8	.61	11.9	NULL	******	1.3	23	6.5	35
02-Jul-2007	BOD5	<ql< td=""><td>7.8</td><td>1.8</td><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td>10.95</td><td>35</td></ql<></td></ql<>	7.8	1.8	11.9	NULL	******	<ql< td=""><td>23</td><td>10.95</td><td>35</td></ql<>	23	10.95	35
07-Aug-2007	BOD5	.03	7.8	.77	11.9	NULL	******	2.3	23	6.4	35
04-Sep-2007	BOD5	.42	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td>0</td><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	11.9	NULL	******	0	23	<ql< td=""><td>35</td></ql<>	35
01-Oct-2007	BOD5	.17	7.8	.69	11.9	NULL	******	1.3	23	5.2	35
06-Nov-2007	BOD5	1.18	7.8	1.18	11.9	NULL	******	10.2	23	10.2	35
03-Dec-2007	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
02-Jan-2008	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
04-Feb-2008	BOD5	1.14	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td>4.2</td><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	11.9	NULL	******	4.2	23	<ql< td=""><td>35</td></ql<>	35
03-Mar-2008	BOD5	.65	7.8	.72	11.9	NULL	******	5.9	23	6.5	35
01-Apr-2008	BOD5	.069	7.8	.084	11.9	NULL	******	5.6	23	7.2	35
06-May-2008	BOD5	.67	7.8	.67	11.9	NULL	******	3.1	23	5.5	35
02-Jun-2008	BOD5	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
07-Jan-2003	DO	NULL	******	NULL	******	6.7	6.0	NULL	******	NULL	******
07-Feb-2003	DO	NULL	******	NULL	******	6.9	6.0	NULL	******	NULL	******
10-Mar-2003	DO	NULL	******	NULL	******	6.3	6.0	NULL	******	NULL	******
07-Apr-2003	DO	NULL	******	NULL	******	7.2	6.0	NULL	******	NULL	******
07-May-2003	DO	NULL	******	NULL	******	7.3	6.0	NULL	******	NULL	******
09-Jul-2003	DO	NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
07-Aug-2003	DO	NULL	******	NULL	******	Х	6.0	NULL	******	NULL	******
11-Sep-2003	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Oct-2003	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Nov-2003	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
10-Dec-2003	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
12-Jan-2004	DO	NULL	******	NULL	******	7.3	6.0	NULL	******	NULL	******
09-Feb-2004	DO	NULL	******	NULL	******	6.3	6.0	NULL	******	NULL	******
10-Mar-2004	DO	NULL	******	NULL	******	8.2	6.0	NULL	******	NULL	******
08-Apr-2004	DO	NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
10-May-2004	DO	NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
08-Jun-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
12-Jul-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
06-Aug-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Sep-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Oct-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
05-Nov-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
08-Dec-2004	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
06-Jan-2005	DO	NULL	******	NULL	******	7.2	6.0	NULL	******	NULL	******
07-Feb-2005	DO	NULL	******	NULL	******	6.5	6.0	NULL	******	NULL	******
07-Mar-2005	DO	NULL	******	NULL	******	6.7	6.0	NULL	******	NULL	******
08-Apr-2005	DO	NULL	******	NULL	******	6.2	6.0	NULL	******	NULL	******
05-May-2005	DO	NULL	******	NULL	******	6.3	6.0	NULL	******	NULL	******
06-Jun-2005	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
08-Jul-2005	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
04-Aug-2005	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
09-Sep-2005	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Oct-2005	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
00 D 000F	DO	AVG NULL	******	NULL	******	MIN	6.0	AVG NULL	******	MAX NULL	******
09-Dec-2005	DO		******		******	6.0	6.0	-	******		******
06-Feb-2006		NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
09-Mar-2006	DO	NULL	******	NULL	******	6.8	6.0	NULL	******	NULL	******
06-Apr-2006	DO	NULL		NULL		6.0	6.0	NULL		NULL	
05-Jun-2006	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
05-Jul-2006	DO	NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
01-Aug-2006	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
06-Sep-2006	DO	NULL	******	NULL	******	6.2	6.0	NULL	******	NULL	******
02-Oct-2006	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
06-Nov-2006	DO	NULL	******	NULL	******	6.5	6.0	NULL	******	NULL	******
04-Dec-2006	DO	NULL	******	NULL	******	6.6	6.0	NULL	******	NULL	******
03-Jan-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
05-Feb-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Mar-2007	DO	NULL	******	NULL	******	6.9	6.0	NULL	******	NULL	******
04-Apr-2007	DO	NULL	******	NULL	******	6.3	6.0	NULL	******	NULL	******
01-May-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
04-Jun-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
02-Jul-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Aug-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
04-Sep-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
01-Oct-2007	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
06-Nov-2007	DO	NULL	******	NULL	******	6.1	6.0	NULL	******	NULL	******
03-Dec-2007	DO	NULL	******	NULL	******	7.4	6.0	NULL	******	NULL	******
02-Jan-2008	DO	NULL	******	NULL	******	7.5	6.0	NULL	******	NULL	******
04-Feb-2008	DO	NULL	******	NULL	******	7.3	6.0	NULL	******	NULL	******
03-Mar-2008	DO	NULL	******	NULL	******	7.1	6.0	NULL	******	NULL	******
01-Apr-2008	DO	NULL	******	NULL	******	7.0	6.0	NULL	******	NULL	******
06-May-2008	DO	NULL	******	NULL	******	6.8	6.0	NULL	******	NULL	******
02-Jun-2008	DO	NULL	******	NULL	******	6.0	6.0	NULL	******	NULL	******
07-Oct-2003	E.COLI	NULL	******	NULL	******	NULL	******	57.7	NL	NULL	******
07-Nov-2003	E.COLI	NULL	******	NULL	******	NULL	******	70.1	NL	NULL	******
10-Dec-2003	E.COLI	NULL	******	NULL	******	NULL	******	77	NL	NULL	******
12-Jan-2004	E.COLI	NULL	******	NULL	******	NULL	******	6.7	NL	NULL	******

10.75eb-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   NULL   146,   NULL   148,   NULL   148,   NULL   160,   NULL   160,	Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
66-Mar-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   198   NULL   198   NULL   10-Apy-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   100   NULL   170   NULL   178   NULL   10-Apy-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   NULL   161   NULL   164   NULL   165   NULL   165   NULL   165   NULL   165   NULL   165   NULL   166   NULL   16	07 5-1- 0000	HADDNESS TOTAL (AS CACO2)	AVG	NII II I	AU II I	NII II I	MIN	NII II I	AVG	N I I I	MAX	NII II I
10-Agr-2000		. , ,	-	-			_			-		-
QAMBY-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   NULL   164   NULL   164   NULL   164   NULL   165   NULL   165   NULL   165   NULL   166   NULL   167   NULL   167   NULL   167   NULL   167   NULL   168   NULL   168		, , ,	-	-		-	_			-		-
11-Jul-2000	<u> </u>	, , ,	-	-			-		-		-	
11-Jul-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   NULL   NULL   149   NULL   160   NULL   OF-Sep-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   166   NULL   168   NULL   168   NULL   169   NULL   OF-Nov-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   164   NULL   165   NULL   165   NULL   166   NULL   167   NULL   168   NULL   169   NULL   168   N		` '										
07-Sep-2000         HARDNESS, TOTAL (AS CACO3)         NULL         1166         NULL         1168         NULL         1168         NULL         1168         NULL         1168         NULL         1160         NULL		` '		-		-	_			-		
06-Oct-2000			-				_		-			
07.Nov.2000         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         156         NULL         158         NULL         160         NULL         00-Dec-2000         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         157         NULL         160         NULL         00-Dec-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         156         NULL         160         NULL         160         NULL         160         NULL         161         NULL         162         NULL         163         NULL         163         NULL         164	<u> </u>		-	-		_	_			-	-	-
08-Dec-2000   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   NULL   157   NULL   160   NULL   16		, , ,	-	-		-	_		-	-		
08-Jan-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         156         NULL         160         NULL           07-Feb-2001         HARDNESS, TOTAL (AS CACO3)         NULL         170         NULL         NULL         170         NULL         NULL         170         NULL         170         NULL         NULL         NULL         170         NULL         170         NULL         NULL         170         NULL         170         NULL         NULL         NULL         NULL         NULL         NULL	07-Nov-2000	` '	_							-		
07.Feb-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         168         NULL         168         NULL         109-Mar-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         160         NULL         170         N							_					
09-Mar-2001         HARDNESS, TOTAL (AS CACO3)         NULL	08-Jan-2001	· · · · · ·				_	_			-		
06-Apr-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         178         NULL         180         NULL           10-May-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         NULL         NULL         NULL         162         NULL         164         NULL           11-Jun-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         159         NULL         164         NULL           08-Aug-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         144         NULL         148         NULL           10-Sep-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         144         NULL         148         NUL           10-Sep-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         144         NUL         148         NUL         150         174         NL         174         NL         188         NL         118         NL	07-Feb-2001	, , ,	NULL	NULL	NULL	NULL	NULL	NULL	168	-	168	NULL
10-May-2001   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   162   NULL   164   NULL   11-Jun-2001   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   159   NULL   164   NULL   11-Jun-2001   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   155   NULL   160   NULL   16	09-Mar-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	163	-	170	NULL
11-Jun-2001   HARDNESS, TOTAL (AS CACO3)   NULL   NULL   NULL   NULL   NULL   NULL   159,   NULL   164,   NULL   164,   NULL   164,   NULL   165,   NULL   164,   NULL   165,   NULL   166,   NULL	06-Apr-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	178	NULL	180	NULL
09-Jul-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         155         NULL         160         NULL           08-Aug-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         144         NULL         148         NULL           10-Sep-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         148         NL         150           12-Oct-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         172         NL         174         NL           08-Nov-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         185         NL         188         NL           10-Dec-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         200         NL         208         NL           08-Jan-2002         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         190         NL         194         NL           15-Mar-2002         HARDNESS, TOTAL (AS CACO3)         NULL         NULL	10-May-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	162	NULL	164	NULL
08-Aug-2001         HARDNESS, TOTAL (AS CACO3)         NULL         NULL         NULL         NULL         NULL         NULL         144         NULL         148         NULL         148         NULL         150	11-Jun-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	159.	NULL	164.	NULL
10-Sep-2001       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       NULL       NULL       NULL       NULL       148       NL       150         12-Oct-2001       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       NULL       172       NL       174       NL         08-Nov-2001       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       185       NL       188       NL         10-Dec-2001       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       200       NL       208       NL         08-Jan-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       205       NL       216       NL         07-Mar-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       190       NL       194       NL         15-Mar-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       NULL       209       NL       220       NL         10-May-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       NULL       174       NL       188       NL         07-Jun-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL <td>09-Jul-2001</td> <td>HARDNESS, TOTAL (AS CACO3)</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>155</td> <td>NULL</td> <td>160</td> <td>NULL</td>	09-Jul-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	155	NULL	160	NULL
12-Oct-2001 HARDNESS, TOTAL (AS CACO3) NULL **********************************	08-Aug-2001	HARDNESS, TOTAL (AS CACO3)	NULL	NULL	NULL	NULL	NULL	NULL	144	NULL	148	NULL
12-Oct-2001   HARDNESS, TOTAL (AS CACO3)   NULL	10-Sep-2001	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	NL	148	NL	150	******
08-NOV-2001       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       ************************************	12-Oct-2001	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	172	NL	174	NL
08-Jan-2002       HARDNESS, TOTAL (AS CACO3)       NULL       ************************************	08-Nov-2001	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	185	NL	188	NL
07-Mar-2002         HARDNESS, TOTAL (AS CACO3)         NULL         ************************************	10-Dec-2001	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	200	NL	208	NL
15-Mar-2002 HARDNESS, TOTAL (AS CACO3) NULL **********************************	08-Jan-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	205	NL	216	NL
15-Mai-2002       HARDNESS, TOTAL (AS CACO3)       NULL       ************************************	07-Mar-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	190	NL	194	NL
10-May-2002 HARDNESS, TOTAL (AS CACO3) NULL **********************************	15-Mar-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	209	NL	220	NL
07-Jun-2002         HARDNESS, TOTAL (AS CACO3)         NULL         ************************************	05-Apr-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	195	NL	200	NL
07-Jun-2002       HARDNESS, TOTAL (AS CACO3)       NULL       ************************************	10-May-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	174	NL	188	NL
09-Jul-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       ************************************		HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	173	NL	180	NL
08-Aug-2002       HARDNESS, TOTAL (AS CACO3)       NULL       NULL       NULL       ************************************	09-Jul-2002	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	154	NL	158	NL
06-Sep-2002         HARDNESS, TOTAL (AS CACO3)         NULL         ***************************         NULL         ***********************************         161         NL         162         NL           04-Oct-2002         HARDNESS, TOTAL (AS CACO3)         NULL         ***************************         NULL         ***************************         159         NL         160         NL		HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	166	NL	168	NL
04-Oct-2002 HARDNESS, TOTAL (AS CACO3) NULL ********* NULL *******************		HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	*****	NULL	******	161	NL	162	NL
		HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	*****	NULL	******	159	NL	160	NL
	12-Nov-2002	` '	NULL	******	NULL	******	NULL	******	168	NL	174	NL

07-Jan-2003			Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
ا		AVG				MIN		AVG		MAX	
	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	170	NL	184	NL
01 1 02 2000	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	174	NL	186	NL
10 11101 2000	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	187	NL	200	NL
	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	187	NL	190	NL
07-May-2003	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	174	NL	178	NL
09-Jul-2003	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	153	NL	156	NL
07-Aug-2003	HARDNESS, TOTAL (AS CACO3)	NULL	******	NULL	******	NULL	******	154	NL	162	NL
07-Jan-2003 F	PH	NULL	******	NULL	******	6.5	6.0	NULL	******	7.3	9.0
07-Feb-2003 F	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.1	9.0
10-Mar-2003 F	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
07-Apr-2003 F	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.1	9.0
07-May-2003 F	PH	NULL	******	NULL	******	6.5	6.0	NULL	******	7.0	9.0
05-Jun-2003 F	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.1	9.0
09-Jul-2003 F	PH	NULL	******	NULL	******	6.2	6.0	NULL	******	7.0	9.0
07-Aug-2003 F	PH	NULL	******	NULL	******	6.4	6.0	NULL	******	6.9	9.0
11-Sep-2003 F	PH	NULL	******	NULL	******	6.5	6.0	NULL	******	7.2	9.0
07-Oct-2003 F	PH	NULL	******	NULL	******	6.4	6.0	NULL	******	7.0	9.0
07-Nov-2003 F	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.1	9.0
10-Dec-2003 F	PH	NULL	******	NULL	******	6.4	6.0	NULL	******	7.0	9.0
12-Jan-2004 F	PH	NULL	******	NULL	******	6.5	6.0	NULL	******	7.1	9.0
09-Feb-2004 F	PH	NULL	******	NULL	******	6.4	6.0	NULL	******	7.5	9.0
10-Mar-2004 F	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
08-Apr-2004 F	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
10-May-2004 F	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
08-Jun-2004 F	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
12-Jul-2004 F	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
06-Aug-2004 F	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.4	9.0
	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.4	9.0
05-Nov-2004 F	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.4	9.0
08-Dec-2004 F	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.6	9.0
06-Jan-2005 F	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.6	9.0
	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.5	9.0

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
08-Apr-2005	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.5	9.0
05-May-2005	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.4	9.0
06-Jun-2005	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.3	9.0
08-Jul-2005	PH	NULL	******	NULL	******	6.6		NULL	******	7.4	9.0
09-Sep-2005	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
07-Oct-2005	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
07-Nov-2005	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
09-Dec-2005	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.5	9.0
06-Feb-2006	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
09-Mar-2006	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
06-Apr-2006	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.5	9.0
05-May-2006	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
05-Jun-2006	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.3	9.0
05-Jul-2006	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
01-Aug-2006	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.4	9.0
06-Sep-2006	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.4	9.0
02-Oct-2006	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.6	9.0
06-Nov-2006	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.4	9.0
04-Dec-2006	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.4	9.0
03-Jan-2007	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.3	9.0
05-Feb-2007	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
07-Mar-2007	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.6	9.0
04-Apr-2007	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.5	9.0
01-May-2007	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.4	9.0
04-Jun-2007	PH	NULL	******	NULL	******	6.7	6.0	NULL	******	7.3	9.0
02-Jul-2007	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.4	9.0
07-Aug-2007	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.5	9.0
04-Sep-2007	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.7	9.0
01-Oct-2007	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.6	9.0
06-Nov-2007	PH	NULL	******	NULL	******	6.9	6.0	NULL	******	7.5	9.0
03-Dec-2007	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.5	9.0
02-Jan-2008	PH	NULL	******	NULL	******	7.1	6.0	NULL	******	7.7	9.0
04-Feb-2008	PH	NULL	******	NULL	******	7.1	6.0	NULL	******	7.7	9.0

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
01-Apr-2008	PH	NULL	******	NULL	******	7.0	6.0	NULL	******	7.4	9.0
06-May-2008	PH	NULL	******	NULL	******	6.8	6.0	NULL	******	7.4	9.0
02-Jun-2008	PH	NULL	******	NULL	******	6.6	6.0	NULL	******	7.3	9.0
07-Oct-2003	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	X	NL	X	NL
09-Feb-2004	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<025	NL	<025	NL
12-Jul-2004	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<.25	NL	<.25	NL
08-Dec-2004	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<0.11	NL	<0.11	NL
05-May-2005	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<0.11	NL	<0.11	NL
07-Nov-2005	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<0.11	NL	<0.11	NL
05-May-2006	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<.25	NL	<.25	NL
19-Sep-2006	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<.25	NL	<.25	NL
07-Mar-2007	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<ql< td=""><td>NL</td><td><ql< td=""><td>NL</td></ql<></td></ql<>	NL	<ql< td=""><td>NL</td></ql<>	NL
04-Sep-2007	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<0.13	NL	<0.13	NL
03-Mar-2008	TRIBUTYLTIN	NULL	******	NULL	******	NULL	******	<.04	NL	<.04	NL
07-Jan-2003	TSS	.75	7.8	.97	12.0	NULL	******	4.3	23.0	5.4	35.0
07-Feb-2003	TSS	.23	7.8	.32	12.0	NULL	******	1.2	23.0	1.3	35.0
10-Mar-2003	TSS	.40	7.8	.68	12.0	NULL	******	2.6	23.0	4.3	35.0
07-Apr-2003	TSS	.38	7.8	.59	12.0	NULL	******	1.5	23.0	2.3	35.0
07-May-2003	TSS	.72	7.8	1.49	12.0	NULL	******	3.3	23.0	5.9	35.0
05-Jun-2003	TSS	2.1	7.8	5.02	12.0	NULL	******	9.0	23.0	19.2	35.0
09-Jul-2003	TSS	2.3	7.8	5.5	12.0	NULL	******	9.7	23.0	23.3	35.0
07-Aug-2003	TSS	1.9	7.8	2.8	12.0	NULL	******	12.5	23.0	19.0	35.0
11-Sep-2003	TSS	1.1	7.8	2.1	11.9	NULL	******	7.4	23	12.8	35
07-Oct-2003	TSS	5.4	7.8	13.7	11.9	NULL	******	34.1	23	95.6	35
07-Nov-2003	TSS	.54	7.8	.73	11.9	NULL	******	3.4	23	4.9	35
10-Dec-2003	TSS	1.4	7.8	2.1	11.9	NULL	******	9.2	23	13.3	35
12-Jan-2004	TSS	.31	7.8	.42	11.9	NULL	******	2.3	23	3.9	35
09-Feb-2004	TSS	.13	7.8	.48	11.9	NULL	******	2.6	23	4.8	35
10-Mar-2004	TSS	.95	7.8	2.5	11.9	NULL	******	6.5	23	14.0	35
08-Apr-2004	TSS	.55	7.8	1.29	11.9	NULL	******	5.5	23	11.6	35
10-May-2004	TSS	1.5	7.8	3.2	11.9	NULL	******	8.0	23	14.4	35
08-Jun-2004	TSS	2.9	7.8	5.4	11.9	NULL	******	16.2	23	32.1	35
12-Jul-2004	TSS	1.6	7.8	2.7	11.9	NULL	******	11.1	23	17.0	35

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
07-Sep-2004	TSS	1.8	7.8	2.4	11.9	NULL	******	14.4	23	18.7	35
07-Oct-2004	TSS	2.2	7.8	1.3	11.9	NULL	******	7.6	23	10.7	35
08-Dec-2004	TSS	1.11	7.8	1.37	11.9	NULL	******	12.9	23	17.1	35
06-Jan-2005	TSS	.074	7.8	.145	11.9	NULL	******	.80	23	1.2	35
07-Feb-2005	TSS	.44	7.8	.65	11.9	NULL	******	3.4	23	6.1	35
07-Mar-2005	TSS	.54	7.8	1.23	11.9	NULL	******	5.3	23	12.2	35
08-Apr-2005	TSS	.13	7.8	4.9	11.9	NULL	******	9.4	23	33.6	35
05-May-2005	TSS	.31	7.8	.36	11.9	NULL	******	2.6	23	3.1	35
06-Jun-2005	TSS	.50	7.8	1.55	11.9	NULL	******	3.3	23	7.1	35
08-Jul-2005	TSS	2.5	7.8	4.0	11.9	NULL	******	13.3	23	17.6	35
04-Aug-2005	TSS	2.4	7.8	4.3	11.9	NULL	******	13.9	23	24.0	35
09-Sep-2005	TSS	1.4	7.8	1.7	11.9	NULL	******	9.0	23	10.3	35
07-Oct-2005	TSS	.68	7.8	.78	11.9	NULL	******	5.7	23	6.7	35
07-Nov-2005	TSS	.64	7.8	1.13	11.9	NULL	******	4.45	23	7.10	35
09-Dec-2005	TSS	.58	7.8	.53	11.9	NULL	******	3.8	23	4.5	35
06-Feb-2006	TSS	0.8	7.8	2.2	11.9	NULL	******	6.0	23	16.1	35
09-Mar-2006	TSS	.5	7.8	1.4	11.9	NULL	******	4.3	23	12.3	35
06-Apr-2006	TSS	.36	7.8	1.2	11.9	NULL	******	3.4	23	10.7	35
05-May-2006	TSS	.97	7.8	3.32	11.9	NULL	******	8.37	23	27.8	35
05-Jun-2006	TSS	.98	7.8	.88	11.9	NULL	******	7.0	23	12.3	35
05-Jul-2006	TSS	3.0	7.8	1.7	11.9	NULL	******	10.3	23	13.4	35
01-Aug-2006	TSS	.45	7.8	.80	11.9	NULL	******	2.4	23	4.8	35
06-Sep-2006	TSS	.57	7.8	1.23	11.9	NULL	******	3.7	23	8.1	35
02-Oct-2006	TSS	.62	7.8	1.0	11.9	NULL	******	3.8	23	7.1	35
06-Nov-2006	TSS	.8	7.8	2.9	11.9	NULL	******	4.4	23	14.8	35
04-Dec-2006	TSS	<ql< td=""><td>7.8</td><td><ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<></td></ql<>	7.8	<ql< td=""><td>11.9</td><td>NULL</td><td>******</td><td><ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<></td></ql<>	11.9	NULL	******	<ql< td=""><td>23</td><td><ql< td=""><td>35</td></ql<></td></ql<>	23	<ql< td=""><td>35</td></ql<>	35
03-Jan-2007	TSS	.4	7.8	1.1	11.9	NULL	******	3.9	23	9.8	35
05-Feb-2007	TSS	.37	7.8	1.0	11.9	NULL	******	2.4	23	5.1	35
07-Mar-2007	TSS	1.2	7.8	2.0	11.9	NULL	******	10.1	23	17.6	35
04-Apr-2007	TSS	.89	7.8	1.4	11.9	NULL	******	4.2	23	5.2	35
01-May-2007	TSS	.30	7.8	.48	11.9	NULL	******	2.4	23	4.5	35
04-Jun-2007	TSS	.85	7.8	.85	11.9	NULL	******	5.4	23	6.0	35
02-Jul-2007	TSS	3.23	7.8	7.34	11.9	NULL	******	22.2	23	44.7	35

Rec'd	Parameter Description	QTY	Lim Avg	QTY MAX	Lim Max	CONC	Lim Min	CONC	Lim Avg	CONC	Lim Max
		AVG				MIN		AVG		MAX	
04-Sep-2007	TSS	1.34	7.8	1.48	11.9	NULL	******	9.2	23	11.1	35
06-Nov-2007	TSS	1.12	7.8	1.85	11.9	NULL	******	8.9	23	16.1	35
03-Dec-2007	TSS	.71	7.8	1.19	11.9	NULL	******	6.7	23	11.8	35
02-Jan-2008	TSS	.54	7.8	1.24	11.9	NULL	******	5.1	23	11.5	35
04-Feb-2008	TSS	.29	7.8	.36	11.9	NULL	******	3.8	23	3.4	35
03-Mar-2008	TSS	.61	7.8	1.12	11.9	NULL	******	5.5	23	10.4	35
01-Apr-2008	TSS	.98	7.8	2.39	11.9	NULL	******	8.6	23	20.5	35
06-May-2008	TSS	.55	7.8	1.01	11.9	NULL	******	2.9	23	5.2	35
02-Jun-2008	TSS	2.23	7.8	3.32	11.9	NULL	******	12.0	23	18.3	35

# 6/9/2008 12:10:33 PM

```
Facility = FEMA - Bluemont STP
Chemical = Ammonia
Chronic averaging period = 30
WLAa = 17
WLAc = 2
Q.L. = .2
# samples/mo. = 4
# samples/wk. = 1
```

# Summary of Statistics:

```
# observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average = 10.8544
# < Q.L. = 0
Model used = BPJ Assumptions, type 2 data
```

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 4.03534018683262
Average Weekly limit = 4.03534018683262
Average Monthly Llmit = 2.75906588218996

The data are:

9

# 6/9/2008 12:03:39 PM

Facility = FEMA - Bluemont STP
Chemical = Chlorine
Chronic averaging period = 4
WLAa = 0.019
WLAc = 0.011
Q.L. = .1
# samples/mo. = 28
# samples/wk. = 7

# Summary of Statistics:

# observations = 1
Expected Value = .2
Variance = .0144
C.V. = 0.6
97th percentile daily values = .486683
97th percentile 4 day average = .332758
97th percentile 30 day average = .241210
# < Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 1.60883226245855E-02
Average Weekly limit = 9.8252545713861E-03
Average Monthly Limit = 8.02152773888032E-03

The data are:

0.2

# **FEMA - Bluemont STP**

# **Tributyltin Testing Results**

VA0024759

Date	Analytical Results (μg/L)	Quantification Level (μg/L)
13-Jan-2004	<0.25	0.25
02-Jun-2004	<0.25	0.25
02-Nov-2004	<0.11	0.11
06-Apr-2005	<0.11	0.11
04-Oct-2005	<0.11	0.11
04-Apr-2006	<0.25	0.25
03-Oct-2006	<0.25	0.25
19-Apr-2007	<0.13	0.13
02-Oct-2007	<0.04	0.04
14-Apr-2008	<0.13	0.13

Attachment 8

MEMORANDUM

# State Water Control Board

2111 North Hamilton Street

P. O. Box 11143

Richmond, VA. 23230

NPDES - Loudoun County - U.S. Army -SUBJECT:

Western Virginia Area Office

TO:

A. E. Pollock - BAT

FROM:

Gary N. Moore

DATE:

April 15, 1975

COPIES:

John Hopkins - NRO

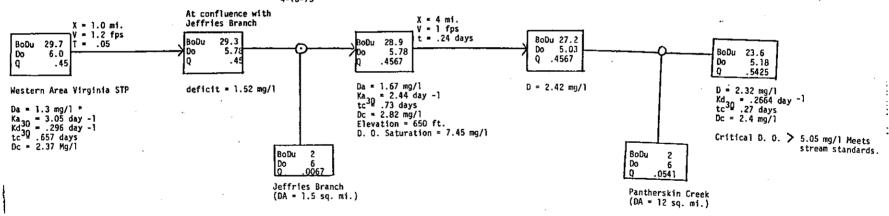
I have run the SAA for this facility again, per your request, using stream standards rather than non-degradation.

23 mg/l  $BOD_5$  and 6.0 mg/l D.O. meet standards in Jeffries Branch and Pantherskin Creek.

/pl

#### U.S. ARMY - WESTERN AREA VIRGINIA OFFICE





#### Public Notice - Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater into a water body in Loudoun County, Virginia.

PUBLIC COMMENT PERIOD: August 20, 2008 to 5:00 p.m. on September 19, 2008

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Federal Emergency Management Agency

P.O. Box 129, Mount Weather, VA 22611

VA0024759

NAME AND ADDRESS OF FACILITY: Mount Weather Emergency Operations Center

19844 Blue Ridge Mountain Road, Mount Weather, VA 20135

PROJECT DESCRIPTION: The Federal Emergency Management Agency has applied for a reissuance of a permit for the Mount Weather Emergency Operations Center. The applicant proposes to release treated sewage wastewaters from the operations at a rate of 0.09 million gallons per day into a water body. Sludge from the treatment process will be disposed of in a landfill. The facility proposes to release the treated sewage in the Jeffries Branch, UT, in Loudoun County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, BOD, TSS, DO, Ammonia, Chlorine, TPH and *E. coli*.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment.

Name: Douglas Frasier

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193 Phone: (703) 583-3873 E-mail: ddfrasier@deq.virginia.gov Fax: (703) 583-3841

# State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

# Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	U.S. Federal Emergency Management Agency – Mt. Weather Emergency Operations
NPDES Permit Number:	VA0024759
Permit Writer Name:	Douglas Frasier
Date:	26 June 2008

Major [ ] Minor [X] Industrial [ ] Municipal [X]

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?	X		
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics		No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet <b>or</b> permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet <b>or</b> permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?			
8. Does the facility discharge to a 303(d) listed water? (upstream)	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?	X		
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?	X		
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?	X		
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

# Part II. NPDES Draft Permit Checklist

# Region III NPDES Permit Quality Checklist – for POTWs

(To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		

II.D. Water Quality-Based Effluer	t Limits – cont.		Yes	No	N/A
5. Are all final WQBELs in the periprovided in the fact sheet?	mit consistent with the justification and/or	documentation	X		
6. For all final WQBELs, are BOTH	I long-term AND short-term effluent limits	s established?	X		
concentration)?	ermit using appropriate units of measure (e		X		
8. Does the record indicate that an 'the State's approved antidegrada	antidegradation" review was performed in tion policy?	accordance with	X		
II.E. Monitoring and Reporting R			Yes	No	N/A
1. Does the permit require at least a monitoring as required by State a	nnual monitoring for all limited parameters and Federal regulations?	s and other	X		
	ate that the facility applied for and was gra t specifically incorporate this waiver?	nted a monitoring			
	ical location where monitoring is to be per	formed for each	X		
3. Does the permit require at least a	nnual influent monitoring for BOD (or BO pplicable percent removal requirements?	D alternative) and		X	
4. Does the permit require testing for					X
II.F. Special Conditions		[	Yes	No	N/A
Does the permit include appropriate biosolids use/disposal requirements?			X		
1 11 1	ate storm water program requirements?				X
II.F. Special Conditions – cont.		[	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?		tory and regulatory	105	110	X
<ol> <li>Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?</li> </ol>		RE, BMPs, special			X
5. Does the permit allow/authorize	discharge of sanitary sewage from points of anitary Sewer Overflows (SSOs) or treatm			X	
	rges from Combined Sewer Overflows (CS			X	
	mentation of the "Nine Minimum Controls				X
1 1	opment and implementation of a "Long Ten				X
	oring and reporting for CSO events?				X
	ate Pretreatment Program requirements?				X
II.G. Standard Conditions			Yes	No	N/A
	FR 122.41 standard conditions or the State	e equivalent (or	X		
List of Standard Conditions – 40 C	FR 122.41				
Duty to comply	Property rights	Reporting Requ	irements		
Duty to reapply  Duty to provide information  Planned ch					
Need to halt or reduce activity	o halt or reduce activity  Inspections and entry  Anticipated noncompliance		pliance		
not a defense	Monitoring and records	Transfers	fers		
Duty to mitigate	Signatory requirement		toring reports		
Proper O & M Bypass Compliance			es		
Permit actions Upset 24-Hour repo			ce		
2. Does the permit contain the addit	ional standard condition (or the State equiv	valent or more			
	regarding notification of new introduction		X		

# Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name

Douglas Frasier

Title

Environmental Specialist II

Signature

Date

26 June 2008